

## Likely Feedstock-Fuel Pathways to be considered for calculating carbon intensities for the LCFS

(Note: the GREET column indicates if the pathway is available in either the current GREET or the CA modified GREET; for heavy oil, AB 1007 effort used simple measures to calculate pathway impacts.\* indicates that either added in AB 1007 work or could be added to GREET with some effort. <sup>s</sup> coarse estimate for AB 1007. <sup>%</sup> is available in a new version of GREET)

	FEEDSTOCK	PROCESS	LOCATION	OTHER	FUEL	GREET	STATUS
<b>C R U D E</b>	CRUDE (light and heavy)	REFINING	49 States		CARBOB	Y	CURRENT
	CRUDE (light and heavy)	REFINING	CALIFORNIA		CARBOB	Y	CURRENT
	CRUDE (light and heavy)	REFINING	OVERSEAS		CARBOB	Y	CURRENT
	TAR SANDS	REFINING	N.AMERICA		CARBOB	N*	CURRENT
	CRUDE (light and heavy)	REFINING	49 States		ULSD	Y	CURRENT
	CRUDE (light and heavy)	REFINING	OVERSEAS		ULSD	Y	CURRENT
	CRUDE (light and heavy)	REFINING	CALIFORNIA		ULSD	Y	CURRENT
	CRUDE (light and heavy)	REFINING	49 States		LPG	Y	CURRENT
	TAR SANDS	REFINING	N.AMERICA		ULSD	N*	CURRENT
	CRUDE	REFINING	CALIFORNIA		LPG	Y	CURRENT
<b>N A T U R A L  G A S</b>	NATURAL GAS	PROCESSING	OUTSIDE CA		LPG	Y	CURRENT
	NATURAL GAS	PROCESSING	OUTSIDE CA		CNG	Y	CURRENT
	NATURAL GAS	PROCESSING	OUTSIDE CA		LNG	Y	CURRENT
	NATURAL GAS	PROCESSING	CALIFORNIA		LNG	Y	CURRENT
	NATURAL GAS	PROCESSING	OUTSIDE CA	LNG	CNG	Y	LIKELY
	NATURAL GAS	FISCHER-TROPSCH	OUTSIDE CA		FT DIESEL	Y	CURRENT
	NATURAL GAS	COMBUSTION	CALIFORNIA		ELECTRICITY	Y	CURRENT
	NATURAL GAS	COMBUSTION	OUTSIDE CA		ELECTRICITY	Y	CURRENT
	NATURAL GAS	REFORMING	CALIFORNIA	20% RPS	LIQUID H2	Y*	LIKELY
	NATURAL GAS	REFORMING	CALIFORNIA	100% RPS	LIQUID H2	Y*	LIKELY
	NATURAL GAS	REFORMING	CALIFORNIA	PIPELINE	LIQUID H2	Y	LIKELY
	CORN (grown in mid-west)	DRY MILLING	49 States	NG	ETHANOL	Y	CURRENT

<b>C O R N</b>	CORN (grown in mid-west)	DRY MILLING	CALIFORNIA	NG	ETHANOL	Y	CURRENT
	CORN (grown in mid-west)	WET MILLING	49 States	NG	ETHANOL	Y	CURRENT
	CORN (grown in mid-west)	DRY MILLING	49 States	COAL	ETHANOL	Y	CURRENT
	CORN (grown in mid-west)	WET MILLING	49 States	COAL	ETHANOL	Y	CURRENT
	CORN (grown in mid-west)	WET MILLING	49 States	Ave. electricity	ETHANOL	Y	CURRENT
	CORN (grown in mid-west)	DRY MILLING	49 States	Ave. electricity	ETHANOL	Y	CURRENT
	CORN (grown in mid-west)	DRY MILLING	49 States	BIOMASS	ETHANOL	Y	CURRENT
	CORN (grown in mid-west)	DRY MILLING	49 States	BIOMASS + COAL	ETHANOL	Y	CURRENT
	SUGARCANE	PROCESSING	BRAZIL	Ave. electricity	ETHANOL	Y <sup>9</sup>	CURRENT
<b>B I O / R E N E W A B L E</b>	SOYBEAN	ESTERIFICATION	OVERSEAS		BIODIESEL	Y	CURRENT
	PALM OIL	ESTERIFICATION	INDONESIA		BIODIESEL	N	CURRENT
	RAPE SEED/MUSTARD	ESTERIFICATION	CALIFORNIA		BIODIESEL	Y*	CURRENT
	CANOLA	ESTERIFICATION	CALIFORNIA		BIODIESEL	Y <sup>\$</sup>	LIKELY
	CANOLA	THERMAL	CALIFORNIA		RENEWABLE DIESEL	N	LIKELY
	WASTE (MEAT PROCESSING)	THERMAL	CALIFORNIA		RENEWABLE DIESEL	N	LIKELY
	WASTE (MEAT PROCESSING)	THERMAL	49 States		RENEWABLE DIESEL	N	LIKELY
	LANDFILL GAS	PROCESSING	CALIFORNIA		HYDROGEN	N	LIKELY

<b>L G</b>		PROCESSING	CALIFORNIA		HYDROGEN	N	LIKELY
	LANDFILL GAS	COMBUSTION	CALIFORNIA		ELECTRICITY	N*	CURRENT
<b>W A S T E</b>	AG WASTE	PROCESSING	CALIFORNIA		ETHANOL	Y	LIKELY
	AG WASTE	PROCESSING	49 States		ETHANOL	Y	LIKELY
	MUNI. WASTE	PROCESSING	CALIFORNIA		ETHANOL	N	MAYBE
	MUNI WASTE	GASIFICATION	CALIFORNIA		FT DIESEL	N	LIKELY
	MUNI WASTE	COMBUSTION	CALIFORNIA		ELECTRICITY	N*	CURRENT
<b>B I O M A S S</b>	BIOMASS	GASIFICATION	CALIFORNIA		LIQUID H2	Y	LIKELY
	BIOMASS	GASIFICATION	CALIFORNIA		HYDROGEN	Y	CURRENT
	BIOMASS	COMBUSTION	CALIFORNIA		ELECTRICITY	Y	CURRENT
	BIOMASS	GASIFICATION	CALIFORNIA		FT DIESEL	Y	LIKELY
	BIOMASS (POPLAR)	CELLULOSIC	CALIFORNIA		ETHANOL	Y	LIKELY
	FOREST RESIDUE	CELLULOSIC	CALIFORNIA		ETHANOL	Y	LIKELY
	SWITCHGRASS	CELLULOSIC	CALIFORNIA		ETHANOL	Y	LIKELY
	PETROLEUM COKE	GASIFICATION	CALIFORNIA		HYDROGEN	N*	LIKELY
	PETROLEUM COKE	COMBUSTION	49 States		ELECTRICITY	N	CURRENT
<b>C O A L</b>	COAL	COMBUSTION	49 States		ELECTRICITY	Y	CURRENT
	COAL	PROCESSING	49 States		FT DIESEL	Y	LIKELY
<b>E</b>	ELECTRICITY	ELECTROLYSIS	49 States		HYDROGEN	Y	CURRENT
	ELECTRICITY	ELECTROLYSIS	CALIFORNIA	CA Grid	HYROGEN	Y*	LIKELY

<b>L E C</b>							
	ELECTRICITY	ELECTROLYSIS	CALIFORNIA	70% RPS	HYDROGEN	Y*	LIKELY
<b>N U C</b>	NUCLEAR	PROCESSING	49 States		ELECTRICITY	Y	CURRENT
	NUCLEAR	PROCESSING	CALIFORNIA		ELECTRICITY	Y	CURRENT
<b>W I N D</b>	WIND POWER	GENERATION	49 States		ELECTRICITY	Y	CURRENT
	WIND POWER	GENERATION	CALIFORNIA		ELECTRICITY	Y	CURRENT
<b>S O L A R</b>	SOLAR	GENERATION	CALIFORNIA		ELECTRICITY	Y	CURRENT
	SOLAR	GENERATION	49 States		ELECTRICITY	Y	CURRENT